Proposed Anglo Leslie 2 Underground Coal Mining Project, Gauteng Province

Our Ref: 10641



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Andrew Salomon

Tel: 021 462 4502

Email: asalomon@sahra.org.za

CaseID: 10641

Date: Friday March 24, 2017

Page No: 1

Final Comment

In terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)

Attention: Anglo Operations

Proposed Anglo Leslie 2 Underground Coal Mining Project. Application for Mining Right, Environmental Authorisation and Waste Management Licence, Gauteng Province. The draft EIAR and EMPr is made available for a period of 30 days (03 Feb 2017 to 03 March 2017) for public and stakeholder review.

Pistorius, J. October 2016. A Phase I Heritage Impact Assessment (Hia) Study For Anglo Operations (Pty) Ltd's Proposed Leslie 2 Project (Near Leandra) In The Gauteng Province.

Millsteed, B. October 2016. Phase 1 Palaeontological Heritage Impact Assessment Report On The Site Of A Mining Right Application On An Area Known As The Leslie 2 Project, Gauteng Province

The proposed development entails coal mining of between 1.4 million and 1.6 million tonnes per annum by means of underground mining using the conventional board and pillar mining method. The depth of the mineral below surface is 150 m to 187 m. It is anticipated that the Leslie 2 Project will have a lifespan of approximately 16 years, inclusive of the construction period. The project area is located approximately 71 km east of Johannesburg in the Lesedi Local Municipality, Sedibeng District Municipality, Gauteng Province.

In terms of probable archaeological impact, the author states that the assessment revealed the following types and ranges of heritage resources:

Historical remains consisting of farmsteads with outbuildings.

Graveyards and graves.

The author notes that the proposed Leslie 2 Project may impact on those heritage resources which are located closest to the footprint of the proposed Leslie 2 Project, namely: GY03 which is located approximately 85m to the east of the conveyor route. FC02.1 and FC02.5 are located approximately 180m to the west of the conveyor route. These two structures are part of a complex of structures which constitute FC02.

The author recommends mitigating the impacts on the historical remains: FC02 has to be studied and documented by a historical architect before any of these remains may be affected in any way.



an agency of the

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

The author states that no mitigation measures are needed for GY03, however precautionary measures should be taken not to disturb the graveyards during the construction phase of the project. This can be prevented by demarcating GY03 with red cautionary tape and by placing 'Danger Graveyard' signposts in order to avoid that the graveyard be damaged by construction personnel or their vehicles. Graveyards that remain unaffected should be managed (by Anglo Operations) to ensure their future unaffected existence during the construction, operation and decommissioning phases of its mining operations. The following mitigation measures are recommended:

Graveyards must be demarcated with fences or with walls and should be fitted with access gates. Regulated visitor hours should be implemented that is compatible with mine safety rules. This will not be necessary when graveyards are located next to national roads.

Corridors of at least 20m should be maintained between graveyard's fences and any developmental components such as roads or other infrastructure that may be developed in the future.

Graveyards should be inspected every three months. Inspections should be noted in an inspection register. The register should outline the state of the graveyards during each inspection. Reports on damages to any of the graves or to the graveyards (fences, walls, gates) should be followed with the necessary maintenance work. Maintenance work should be recorded in the inspection register.

Graveyards should be kept tidy from any invader weeds and any other refuse.

In terms of probable palaeontological impact, the author states that, for surface infrastructure construction the probability of a negative impact upon the palaeontological heritage of the surface 1-2 m of the bedrock and regolith strata is assessed as being nil. For underground mining activities the probability of a negative impact upon the palaeontological heritage of the coal-bearing Vryheid Formation strata underlying the regional scale dolerite sill is assessed as being probable.

The author recommends that: the Environmental Officer, who is able to have access to the working face of the various stopes of the colliery, be trained to recognise the types of plant macrofossils that may be exposed via the mining operations and how to excavate and curate them. This officer should make inspections of newly exposed siliciclastic rock partings before they are coated with fire retardant material to identify if scientifically significant fossils have been exposed. The fossil material could then be excavated, its exact location (including height in the coal seam, coal seam number, and the identification number of the slope recorded. The fossils should then be stored in a safe place and an experience Karoo palaeobotanist must be mandated by the colliery to inspect the fossils, ascertain their significance and to make any necessary recommendations

Proposed Anglo Leslie 2 Underground Coal Mining Project, Gauteng Province

Our Ref: 10641



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Andrew Salomon

Tel: 021 462 4502

Email: asalomon@sahra.org.za

CaseID: 10641

concerning their preservation.

Final Comment

The SAHRA Archaeology, Palaeontology and Meteorites Unit has no objections to this proposed development, provided that the recommendations in the specialist reports and this comment are adhered to, and on the following conditions:

Page No: 3

Date: Friday March 24, 2017

- If any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments and charcoal/ash concentrations), fossils or other categories of heritage resources are found during the proposed activities, SAHRA must be alerted immediately, and a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contacted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance a Phase 2 rescue operation might be necessary.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Andrew Salomon

Heritage Officer: Archaeology

South African Heritage Resources Agency

John Gribble

Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and

Meteorites Unit

South African Heritage Resources Agency

Proposed Anglo Leslie 2 Underground Coal Mining Project, Gauteng Province

Our Ref: 10641



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Andrew Salomon

Tel: 021 462 4502

Email: asalomon@sahra.org.za

CaseID: 10641

Date: Friday March 24, 2017

Page No: 4

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/386055 (, Ref:)

Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.